

## REMARKS

### **APPLICANTS' RESPONSE TO EXAMINER'S "RESPONSE TO ARGUMENTS"**

Regarding the Applicants' arguments made in the Response filed on 5/9/07, the Office Action states:

Applicant's arguments filed on 05/09/2007 with respect to the claim rejection under 35 USC 102 and/or 103, have been fully considered but are moot in view of the new ground(s) of rejection, since the amended and added claims introduce new issue, which changes the scope of the claims (see new ground rejection below).

Further, in response to applicant's argument with respect to claim 11 that Goodman "does not teach or disclose "receiving said reference speech samples captured at *one or more processing points within a gateway*" as claimed (see Remarks: page 9, last paragraph; wherein emphasis in italics is denoted by the applicant), the examiner respectfully disagrees with the applicant and has a different view of the prior art teachings and the claim interpretations. It is noted that Goodman discloses gateway comprising codec (coder/decoder) (col. 4, lines 12-40), so that, at least, a processing point such as a codec in the gateway, can satisfy the claimed and argued limitation "one or more processing point within a gateway", based on broadest reasonable interpretation of claimed limitation in light of specification. Therefore, for at least above reason, the rejection is proper and the applicant's argument is not persuasive.

See Office Action at pages 2-3.

In response to Examiner's remarks, the Applicants would like to point out that the second clause of Claim 11 recites "receiving said reference speech samples captured at one or more processing points within a gateway of said communication system." While the Examiner states that Goodman discloses "[a] gateway comprising codec (coder/decoder) (col. 4, lines 12-40), so that, at least, a processing point such as a codec in the gateway," nowhere does Goodman

disclose “*receiving said reference speech samples* captured at one or more processing points within a gateway,” as recited in Claim 11. While Goodman describes transmitting speech samples from a first test probe to a second test probe (through one or more gateways), Goodman does not disclose anything about receiving a reference speech sample that is captured at a processing point within a gateway. This is evidenced in Goodman, at the Abstract, which states:

Each test probe is capable of placing calls over the VOIP network to the other test probes at different levels of service and measuring call quality using an objective measurement algorithm such as PAMS or PSQM. The measurement results are collected on an ongoing basis to obtain information on the VOIP network's voice call quality.

Thus, calls are made from a test probe to other test probes in an effort to measure results related to the VOIP network's (end to end) voice call quality. Thus, there is no receipt of speech samples captured at a processing point within a gateway. Furthermore, while Goodman, at col. 4 lines 12-40, discloses that the type of codec may be used to determine a level of service to perform a voice call listening quality test in which a speech sample is transmitted between a first probe to a second probe, nowhere does Goodman, at col. 4 lines 12-40, disclose anything about “*receiving said reference speech samples* captured at one or more processing points within a gateway.” Therefore, for the foregoing reasons, the Applicants respectfully submit that Goodman does not teach what is recited in Claim 11. Consequently, the Office Action does not show a teaching of each and every element recited in Claim 11. Thus, the Applicants believe that Claim 11 contains patentable subject matter. Applicants respectfully submit that Claim 11 and dependent Claims 12-13, 15-17, and 49-54 are in condition for allowance.

## **CLAIMS**

### **CLAIM OBJECTIONS**

Claims 19 and 30 were objected to because of the following, as stated on page 3 of the Office Action:

Regarding claim 19, there are two separate recitations of "a communication system" before the limitation of "**said** communication system" in the second component of claim body, so that, it is unclear that to which one of the two antecedent bases the limitation is referred and/or what the relationship between the two antecedent bases really is. Appropriate correction or clarification is required.

Regarding claim 30, similar to claim 19, the limitation of "**said** communication system" in line 4 of the claim has two separate antecedent bases, so that it is unclear that to which one the limitation is referred and/or what the relationship between the two antecedent bases really is. Appropriate correction or clarification is required.

The Applicants have responded to Examiner's objection to Claims 19 and 30. Applicants have corrected antecedent basis issues with respect to Claims 19 and 20. Claims 19 and 20 are presented in the Listing of the Claims.

### **REJECTION OF INDEPENDENT CLAIMS 11, 19, 30, AND 41 UNDER 35 U.S.C. § 102(e)**

Independent Claims 11, 19, 30, and 41 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 7,173,910 ("Goodman").

### **Independent Claim 19**

Regarding Claim 19, the Office Action states:

As per **claim 19**, as best understood in view of claim rejection under 35 USC 112 2<sup>nd</sup>, (see above), GOODMAN discloses 'service level agreements based on objective voice quality testing for voice over IP (VOIP) networks' (title) for 'a network-wise monitoring system' (col. 7, lines 3-5), comprising:

"a first voice analysis platform for transmitting a reference speech sample through a communication system"; (Figs. 1-2 and col. 3, lines 5-67, 'voice quality test probes 14a and 14b' 'store software algorithm implementing a perceptual or voice call listening quality test model', 'analyzes the voice quality of the recorded voice file (so interpreted as voice analysis platform)', and 'transmit ...the reference voice files (speech sample) over the speech path within the VOIP network (communication system)', 'one test probe acts as a resource to transmit the file'); and

"a second voice analysis platform for receiving said reference speech sample transmitted through said communication system" (similarly, Figs. 1-2 and col. 3, lines 5-57, 'voice quality test probes 14a and 14b' 'store software algorithm implementing a perceptual or voice call listening quality test model (so as interpreted as voice analysis platform)' and 'receive the reference voice files (speech sample) over the speech path within the VOIP network (communication system)', 'a second test probe acts as a resource to receive the file transmitted'),

"said communication system comprising one or more signal processing elements used to process said reference speech sample", (Figs. 1-2 and col. 3, lines 12-27, 'gateway' and 'IP communication devices' (signal processing elements), col. 4, lines 12-33, 'codecs' (signal processing elements) used by 'the VOIP communications device' including 'gateway' (can be interpreted as signal processing element or communication system)'),

"said first voice analysis platform or said second voice analysis platform receiving a selected output from a signal processing element of said one or more signal processing elements, said output used to compute a voice quality score" (Figs. 1-3 and col. 4, lines 3-17, 'when the analysis is complete, the test probe translates the difference into a PAMS score', 'the voice listening quality test is

performed for each level of service as determined (selecting output from a signal processing element) by the type of codec (i.e., coder/decoder) that is used by the VOIP communication device that is performing the voice encoding and decoding operations'; col. 7, lines 12-22, 'all test probes in the network are configured and controlled by the manager' that 'stores the consolidated information in a database for analysis'; col. 7, lines 30-60, 'supports a large number of VOIP Points (outputs) of Presence (VOIP POPs)'; col. 3, lines 28-29, 'the test probes also store a software algorithm implementing a perceptual or voice call listening quality test model', including 'Perceptual Analysis Measurement System (PAMS)' and 'Perceptual Speech Quality Measurement (PSQM)' that provide objective voice quality scores; it is noted that either the test probe or combination of the test probes and the manager can be read on the voice analysis platform).

*See Office Action at pages 4-5.*

Claim 19 recites "a system for monitoring degradation of voice quality in a communication system comprising a first voice analysis platform for transmitting a reference speech sample through said communication system; and a second voice analysis platform for receiving said reference speech sample transmitted through said communication system, said communication system comprising one or more signal processing elements used to process said reference speech sample, said first voice analysis platform or said second voice analysis platform receiving a selected output from a signal processing element of said one or more signal processing elements, said output used to compute a voice quality score."

The second clause of Claim 19 recites "a second voice analysis platform for receiving said reference speech sample transmitted through said communication system, said communication system comprising one or more signal processing elements used to process said reference speech sample, said first voice analysis platform or said second voice analysis platform receiving a selected output from a signal processing element of said one or more signal

processing elements, said output used to compute a voice quality score.” In an attempt to show a teaching of the second clause of Claim 19, the Applicants respectfully submit that the Examiner has misinterpreted and/or mischaracterized what is actually disclosed in Goodman. For example, the Examiner believes that “the voice listening quality test is performed for each level of service as determined” (i.e., Goodman, at col. 4 lines 12-13) teaches “selecting [sic] output from a signal processing element,” as recited in Claim 19. The Applicants do not see how Goodman, at col. 4 lines 12-13, could be interpreted as “receiving a selected output from a signal processing element of said one or more signal processing elements,” as recited in Claim 19. Goodman, at col. 4 lines 12-13, describes that a type of codec may be used to determine a level of service to perform a voice call listening quality test in which a speech sample is transmitted between a first probe to a second probe. Thus, this has nothing to do with “receiving a selected output from a signal processing element of said one or more signal processing elements,” as recited in Claim 19. Thus, the Applicants respectfully submit that the Office Action has not shown a teaching of each and every element that is recited in Claim 19. Consequently, Claim 19 contains patentable subject matter which should be advanced to allowance. As a result of providing the foregoing arguments with respect to independent Claim 19, the Applicants may not have commented on all the remarks made by the Examiner regarding the dependent claims, but reserve the right to do so in the future should the need arise. Furthermore, for at least the reason that Claims 20-29 depend on allowable Claim 19, Applicants respectfully submit that Claims 20-29 are in condition for allowance. Thus, the Applicants respectfully request allowance of Claims 19-29.

**Dependent Claim 29**

Regarding Claim 29, the Office Action states:

As per claim 29 (depending on claim 19), GOODMAN further discloses:

"said first voice analysis platform comprises a software module, said software module comprising software that provides configuration data to a gateway" (col. 3, lines 32-36, col. 4, lines 12-33 and col. 5, lines 4-5, 'test probes store a software algorithm (software module) implementing a perceptual or voice all listening quality test model' that 'is performed for each level of service' based on 'both codec (signal processing element) and IP signaling protocol (configuration data)' corresponding to one of the assigned unique telephone numbers (also read on configuration data in broad sense) that is called (provided) to a gateway; also see Figs. 1 and 4),

"said gateway comprising one or more signal processing elements" (col. 4, lines 1218, [sic] 'codec (i.e. coder/decoder) (interpreted as one or more signal processing elements)' used by 'VOIP communication device' such as 'gateways' that implement one or more coding schemes (also read on signal processing elements) to support voice encoding/decoding'; Fig.4, wherein the data (telephone#, service level (or protocol) and routing info.) in the gateway configuration table can also be read on configuration data or signal processing elements),

"said configuration data used in determining said selected output from one or more outputs corresponding to said one or more signal processing elements" (col. 5, lines 17-25, 'gateway is configured with resources to perform both types of coding and signaling (configuration data)', 'the gateway 16a determines from the service level information associated with the called phone number (selected outputs)').

*See* Office Action at pages 6-7.

Claim 29 recites "the system of Claim 19 wherein said first voice analysis platform comprises a software module, said software module comprising software that provides configuration data to a gateway, said gateway comprising said one or more signal processing

elements, said configuration data used in determining said selected output from one or more outputs corresponding to said one or more signal processing elements.”

The Examiner references Goodman, at col. 5, lines 17-25, in an attempt to show a teaching of “said configuration data used in determining said selected output from one or more outputs corresponding to said one or more signal processing elements,” as recited in Claim 29. Goodman, at col. 5, lines 17-25, states:

Gateway 16a is configured with resources to perform both types of coding and signaling, but selects the appropriate coding for the call to the test probe 14b and call signaling to establish a connection with the gateway 16b based on the phone number. Typically, the gateways include a configuration table which stores the called phone numbers with associated service level information for look-up, as will be described in further detail below.

Based on the preceding passage obtained from Goodman, at col. 5, lines 17-25, there is no teaching of “said configuration data used in determining said selected output from one or more outputs corresponding to said one or more signal processing elements.” Goodman discloses a configuration table that stores phone numbers with associated service level information for look-up, but does not disclose anything about configuration data used in determining a selected output from one or more outputs corresponding to one or more signal processing elements. Therefore, for at least the foregoing reason, Goodman does not teach what is recited in Claim 29. The Applicants respectfully submit that the Office Action has not shown a teaching of each and every element recited in Claim 29. Consequently, Claim 29 contains patentable subject matter that should be advanced to allowance.



**Independent Claim 11**

Regarding Claim 11, the Office Action states:

As per claim 11, it recites a method. The rejection is based on the same reason described for claim 19, because it also reads on the limitations of claim 11.

*See* Office Action at page 7.

Claim 11 recites “a method of assessing voice quality of a communication system comprising: transmitting reference speech samples into said communication system; receiving said reference speech samples captured at one or more processing points within a gateway of said communication system; and determining voice quality scores based on said captured reference speech samples.”

Since the Examiner states that the rejection for Claim 11 is based on the same reason he described for Claim 19, the Applicants respectfully request the Examiner to refer to Applicants’ arguments set forth above with regard to the rejection of Claim 19. Furthermore, the Applicants respectfully request the Examiner to review Applicants’ arguments for Claim 11 provided in the section entitled APPLICANTS’ RESPONSE TO EXAMINER’S “RESPONSE TO ARGUMENTS”. For example, the Applicants maintain that the Office Action has not shown a teaching of “receiving said reference speech samples captured at one or more processing points within a gateway of said communication system,” as recited in Claim 11. Thus, Applicants believe that Claim 11 contains patentable subject matter. Consequently, the Applicants respectfully submit that the patentable subject matter in Claim 11 should be advanced to allowance. Furthermore, as a result of providing the foregoing arguments with respect to independent Claim 11, the Applicants may not have commented on all the remarks made by the Examiner regarding the dependent claims, but reserve the right to do so in the future should the

need arise. Furthermore, for at least the reason that Claims 12-13, 15-17, and 49-54 depend on allowable Claim 11, Applicants respectfully submit that Claims 12-13, 15-17, and 49-54 are in condition for allowance. Thus, the Applicants respectfully request allowance of Claims 11-13, 15-17, and 49-54.

### **Independent Claim 30**

Regarding Claim 30, the Office Action states:

As per claim 30, the rejection is based on the same reason described for claim 19, because it also reads on the limitations of claim 30.

*See* Office Action at page 7.

Claim 30 recites “a system for monitoring degradation of voice quality in a communication system comprising: a voice analysis platform for transmitting and receiving a reference speech sample through a communication system, said communication system comprising one or more signal processing elements used to process said reference speech sample, said voice analysis platform receiving a selected output from a signal processing element of said one or more signal processing elements, said output used to compute a voice quality score.”

Since the Examiner states that the rejection for Claim 30 is based on the same reason he described for Claim 19, the Applicants respectfully request the Examiner to refer to Applicants’ arguments set forth above with regard to the rejection of Claim 19. Furthermore, the Applicants respectfully request the Examiner to review Applicants’ arguments provided in the section entitled APPLICANTS’ RESPONSE TO EXAMINER’S “RESPONSE TO ARGUMENTS”. For example, the Applicants maintain that the Office Action has not shown a teaching of a

“voice analysis platform receiving a selected output from a signal processing element of said one or more signal processing elements,” as recited in Claim 30. Thus, Claim 30 contains patentable subject matter. Consequently, the Applicants respectfully submit that the patentable subject matter in Claim 30 should be advanced to allowance. Furthermore, as a result of providing the foregoing arguments with respect to independent Claim 30, the Applicants may not have commented on all the remarks made by the Examiner regarding the dependent claims, but reserve the right to do so in the future should the need arise. Furthermore, for at least the reason that Claims 31-39 depend on allowable Claim 30, Applicants respectfully submit that Claims 31-39 are in condition for allowance. Thus, the Applicants respectfully request allowance of Claims 30-39.

#### **Dependent Claim 40**

Claim 40 recites “The system of Claim 30 wherein said voice analysis platform comprises a software module, said software module comprising software that provides configuration data to a gateway, said gateway comprising said one or more signal processing elements, said configuration data used in determining said selected output from one or more outputs corresponding to said one or more signal processing elements.

The Examiner has stated that Claim 40 is rejected based on the same reason described for Claim 29. Consequently, the Applicants respectfully request the Examiner to refer to Applicants’ arguments set forth above regarding the rejection of Claim 29.

For at least the reasons provided by the Applicants for Claim 29, the Applicants respectfully submit that Goodman does not teach what is recited in Claim 40. Therefore,

Applicants believe that the Office Action has not shown a teaching of Claim 40. Thus, Applicants believe that Claim 40 is in condition for allowance.

**Independent Claim 41**

Regarding Claim 41, the Office Action states:

As per claim 41, it recites a method. The rejection is based on the same reason described for claim 19, because the claim recites the same or similar limitation(s) as claim 19.

*See* Office Action at page 7.

Claim 41 recites “a method of assessing voice quality at various points along a communication system comprising: transmitting a reference speech sample from a first voice analysis platform to a second voice analysis platform; monitoring one or more outputs of one or more signal processing elements of said communication system; and using said one or more outputs to generate one or more corresponding voice quality scores.”

Since the Examiner states that the rejection for Claim 41 is based on the same reason he described for Claim 19, the Applicants respectfully request the Examiner to refer to Applicants’ arguments set forth above with regard to the rejection of Claim 19. Furthermore, the Applicants respectfully request the Examiner to review Applicants’ arguments provided in the section entitled APPLICANTS’ RESPONSE TO EXAMINER’S “RESPONSE TO ARGUMENTS”. For example, the Applicants maintain that the Office Action has not shown a teaching of a “monitoring one or more outputs of one or more signal processing elements of said communication system; and using said one or more outputs to generate one or more corresponding voice quality scores,” as recited in Claim 41. Thus, Claim 41 contains patentable subject matter. Consequently, the Applicants respectfully submit that the patentable subject

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matter in Claim 41 should be advanced to allowance. Furthermore, as a result of providing the foregoing arguments with respect to independent Claim 41, the Applicants may not have commented on all the remarks made by the Examiner regarding the dependent claims, but reserve the right to do so in the future should the need arise. Furthermore, for at least the reason that Claims 42-48 depend on allowable Claim 41, Applicants respectfully submit that Claims 42-48 are in condition for allowance. Thus, the Applicants respectfully request allowance of Claims 41-48.

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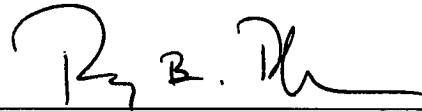
### CONCLUSION

Based on at least the foregoing, Claims 11-13, 15-17, and 19-54 are in condition for allowance. Therefore, a Notice of Allowance is courteously solicited. Should anything remain in order to place the present Application in condition for allowance, or should the Examiner disagree or have any question regarding this submission, the Examiner is kindly invited to contact the undersigned at (312) 775-8246.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Dated: September 10, 2008

Respectfully submitted,



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